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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,762	10/03/2003	Frank Mooijman	120832-4	1623

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EXAMINER

MORROW, JASON S

ART UNIT PAPER NUMBER

3612

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,762

Applicant(s)

MOOIJMAN ET AL.

Examiner

Jason S. Morrow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/3/03</u> . | 6) ☐ Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: In claim 1, line 3, "attached" should be changed to --attach--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 7-15, 17-24, 26, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Trappe.

Re claim 1, Trappe discloses a bumper system for an automobile vehicle, the vehicle having vehicle rails, the bumper system comprising a beam (24) configured to be attached to vehicle rails, and an energy absorber (22) coupled to the beam, the energy absorber being tunable for meeting predetermined criteria for both low speed and pedestrian impacts, the energy absorber comprising a flanged (52) frame for attachment to said beam, and a body comprising a plurality of lobes (see figure 5) extending from said flanged frame and spaced apart from each other, each lobe comprising first and second side walls (72), said first and second side walls having a concave shape.

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Re claim 2, each lobe comprises a first traverse wall (62) extending from said flanged frame; and a second traverse wall (64) spaced apart from the first traverse wall and extending from the flanged frame, the first and second traverse walls extending between the first and second side walls.

Re claim 3, the energy absorber further comprises a strap (92) member located between each adjacent lobe

Re claim 4, each lobe further comprises an outer wall (82, 84), first and second side walls, the first and second traverse walls, and the outer wall defining a hollow crush box.

Re claim 5, the first and second traverse walls comprise openings (unmarked, see figure 10) of predetermined size and shape.

Re claim 7, the first and second side walls comprise openings (88) of predetermined size and shape.

Re claim 8, the energy absorber is injection molded (column 2, line 13).

Re claim 9, the beam comprises at least one of steel, aluminum, thermoplastic, and glass mat thermoplastic (see column 5).

Re claim 10, the first and second spaced transverse walls are rippled (see figure 9).

Re claim 11, Trappe discloses a bumper assembly for an automotive vehicle having vehicle rails, the bumper assembly comprising a beam (24) configured to attach to vehicle rails; an energy absorber (22) coupled to said beam, the energy absorber being tunable for meeting predetermined criteria for both low speed and pedestrian impacts, the energy absorber comprising a flanged (52) frame for attachment to the beam, and a body comprising a plurality of lobes extending from the flanged frame and spaced apart from each other, each lobe (see figure

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5) comprising first and second side walls, the first and second side walls (72) having a concave shape, and a fascia (25) attachable to the energy absorber to substantially envelop said beam and the energy absorber.

Re claim 12, each lobe comprises a first traverse wall (62) extending from the flanged frame, and a second traverse wall (64) spaced apart from the first traverse wall and extending from the flanged frame, the first and second traverse walls extending between the first and second side walls.

Re claim 13, the energy absorber further comprises a strap (92) member located between each adjacent lobe.

Re claim 14, each lobe further comprises an outer wall (82, 84), the first and second side walls, the first and second traverse walls, and the outer wall defining a hollow crush box.

Re claim 15, the first and second traverse walls and the first and second side walls comprise openings (unmarked, see figure 10) of predetermined size and shape.

Re claim 17, the energy absorber is injection molded (column 2, line 13).

Re claim 18, the beam comprises at least one of steel, aluminum, thermoplastic, and glass mat thermoplastic (see column 5).

Re claim 19, the first and second spaced transverse walls are rippled (see figure 9).

Re claim 20, Trappe discloses an energy absorber (22) for a vehicle bumper system, the energy absorber being tunable for meeting predetermined criteria for both low speed and pedestrian impacts and comprising a flanged (52) frame, and a body comprising a plurality of lobes (see figure 5) extending from the flanged frame and spaced apart from each other, each

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lobe comprising first and second side walls (72), the first and second side walls having a concave shape.

Re claim 21, each lobe comprises a first traverse wall (62) extending from the flanged frame, and a second traverse wall (64) spaced apart from the first traverse wall and extending from the flanged frame, the first and second traverse walls extending between the first and second side walls.

Re claim 22, the energy absorber further comprises a strap (92) member located between each adjacent lobe.

Re claim 23, each lobe further comprises an outer wall (82, 84), the first and second side walls, the first and second traverse walls, and the outer wall defining a hollow crush box.

Re claim 24, the first and second traverse walls and the first and second side walls comprise openings (88) of predetermined size and shape.

Re claim 26, the energy absorber is injection molded (column 2, line 13).

Re claim 27, the first and second spaced transverse walls are rippled (see figure 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 16, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trappe.

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Trappe discloses all the limitations of the claims, as applied above, except for the openings being teardrop shaped.

It would have been an obvious matter of design choice to modify a bumper system, such as that disclosed above, to have teardrop shaped openings, since applicant has not disclosed that this particular shape solves any stated problem or is for any particular purpose and it appears the device would perform equally well with square openings.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Glance et al., Hartel et al., and Weissenborn disclose vehicle bumpers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason S. Morrow whose telephone number is (703) 305-7803. The examiner can normally be reached on Monday-Friday, 8:00a.m.-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

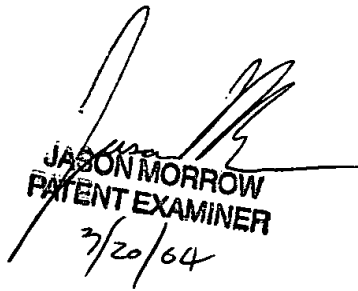
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Jason S. Morrow
Examiner
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March 20, 2004


JASON MORROW
PATENT EXAMINER
3/20/04